Illumination device with at least one LED as the light source

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Abstract of **EP1278250**

Illuminating unit comprises an LED as a light source emitting primary radiation in the region of 300-485 nm. The radiation is converted partially or completely into longer wavelength radiation using a luminescent material emitting yellow-orange with a wavelength of the peak emission at 540-620 nm and originating from Eu-activated Sialon of formula <??>Mp/2Si12-pqAlp+qOqN16-q/; <??>Eu<2+> (where M = Ca or Ca in combination with Sr or Mg; q = 0-2.5; and p = 0.5-3). <??>Preferred Features: The Al can be partially (up to 20 mol.%) replaced by Ga. The average grain diameter of the luminescent powder is 0.5-5 mu m. The primary radiation is a chlorosilicate or a Y- or Tb-based garnet.

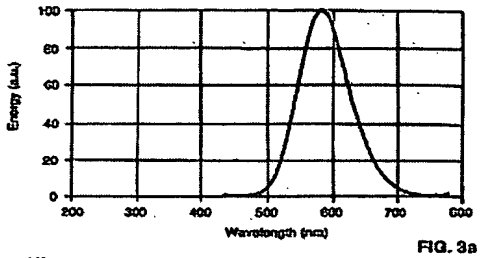

FIG. 3a

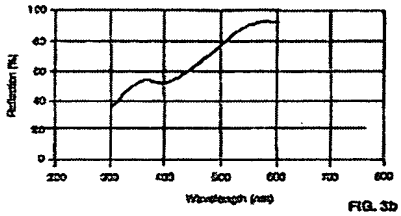

FIG. 3b

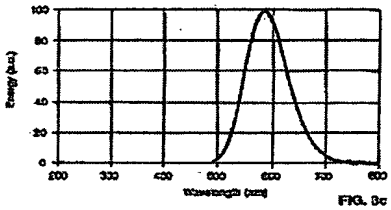

FIG. 3c

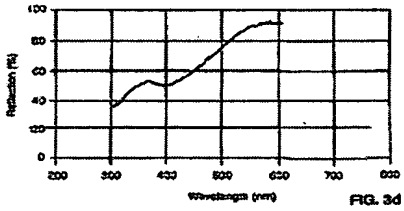

FIG. 3d

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